THE AMENDMENTS

In the Claims:

1. (Currently Amended) A method for discriminating $p16^{INK4a}$ overexpressing metaplasias from $p16^{INK4a}$ overexpressing neoplastic or dysplastic lesions in a uterine cervix sample in the course of cytological testing procedures comprising:

   a. determining the presence or absence of cells overexpression of $p16^{INK4a}$ in said sample;

   b. determining the presence or absence of cells expressing at least one high risk HPV gene-product in said sample, wherein the high risk HPV gene-product is a polypeptide; and

   c. assessing simultaneous presence of cells expressing the high risk HPV gene-product and cells overexpressing $p16^{INK4a}$, or the presence of cells overexpressing $p16^{INK4a}$ alone;

   ~~wherein~~ d. characterizing the simultaneous presence of cells expressing the high risk HPV gene-product and cells overexpressing $p16^{INK4a}$ ~~is~~ as indicative of neoplastic or dysplastic lesion, and

   e. characterizing the presence of cells overexpressing $p16^{INK4a}$ alone ~~is~~ as indicative of metaplasias.

2. (Cancelled)

3. (Previously Presented) The method according to claim 1, wherein the high risk HPV gene-product is encoded by the HPV E7 gene.

4. (Withdrawn-Previously Presented) The method according to claim 1, wherein the high risk HPV gene-product is encoded by HPV E2 and/or E6 genes.

5. (Withdrawn-Previously Presented) The method according to claim 1, wherein the high high risk HPV gene-product is encoded by HPV L1 and/or L2 genes.

6-10. (Cancelled)

11. (Previously Presented) The method according to claim 1, wherein the sample is a Pap smear or a cytological preparation of the cervix uteri.

12. (Previously Presented) The method according to claim 1, wherein the detection of the HPV gene-products and of $p16^{INK4a}$ is performed using one or more probes specific for the HPV gene-products and $p16^{INK4a}$.

13. (Previously Presented) The method according to claim 12, wherein the probe is detectably labelled.

14. (Previously Presented) The method according to claim 13, wherein the label is selected from the group consisting of a radioisotope, a bioluminescent compound, a chemiluminescent compound, a fluorescent compound, a metal chelate, or an enzyme.

15. (Previously Presented) The method according to claim 12, wherein the probe is a polypeptide.

16. (Previously Presented) The method according to claim 15, wherein the probe is an antibody directed against a high risk HPV encoded gene-product or $p16^{INK4a}$.

17. (Original) The method according to claim 16, which comprises an immuno-cytochemical staining procedure.

18-21. (Cancelled)

22. (Previously Presented) The method according to Claim 15, wherein detection of the high-risk HPV gene-product and $p16^{INK4a}$ is carried out simultaneously.

23. (Currently Amended) The method according to claim 1, wherein the high risk HPV gene-product is a gene-product of the cancer associated HPV subtypes HPV 16, 18, 31, 33, 35, 39, 45, 51, 52, 56 or 58.

24. (Previously Presented) The method according to claim 1, wherein overexpression of $p16^{INK4a}$ and expression of at least one high risk HPV gene-product is simultaneous determined in at least one single cell.

25-26. (Cancelled)

27. (Currently Amended) The method according to Claim 1, wherein the presence or absence of cells ~~overexpression of~~ overexpressing $p16^{INK4a}$ and the presence or absence of cells expressing the high risk HPV gene-product is determined on a slide preparation.